

**Job Title:** Systems Analyst/Programmer I

**Job Grade Level:** 9

**Career Track:** First in a I, II Series

**Job EEO Code:**

**Agency/Department:** Office of the Revisor of Statutes

**Date:** 9/12/2006  
(updated 5/14/08)  
(updated 9/14/2014)

**Reporting to:** Deputy Revisor for Information Systems. Functional reporting to Systems Analyst/Programmer II, Data Systems Project Manager

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**Primary Objective:** The Systems Analyst/Programmer I provides computer programming and/or systems administration work necessary to develop, operate and maintain the Revisor's Office computer systems.

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### **Responsibilities & Tasks:**

The Systems Analyst/Programmer I performs programming or systems administration or database administration functions. Each individual in this job classification, however, has a primary focus in one or the other of these broad areas.

1. Provide computer programming functions:
  - a. Design, program, test and document new functions and features for in-house developed applications. This includes assistance in the development of new XTEND software applications.
  - b. Enhance existing functions and features for in-house developed applications needed for better efficiency and more flexibility. This may include XTEND, web applications, or applications designed in Oracle.
  - c. Modify and enhance software purchased for special applications, such as the CINDEK software for indexing.
  - d. Evaluate and correct problems that arise in the use of any of the types of applications in a to c.
2. Provide one or more systems administration functions.
  - a. All system administration functions include the following duties:
    - i. continuous training in relevant technologies
    - ii. planning for the needs of the office, researching hardware and software requirements, and making purchase recommendations to the Deputy Revisor for Information Systems
    - iii. installation of both software and hardware to provide for system operation
    - iv. installation of software, and optionally hardware, to perform disk backups
    - v. ongoing maintenance, configuration, administration, trouble-shooting, and technical support of systems
  - b. Microsoft Windows systems administration. This is the system necessary to operate Microsoft Windows applications, such as Word, Excel, and Access, and other applications such as Cindex.
  - c. Security firewall administration, including related functions such as the router, shared services (DMZ), and virtual private network concentrator.

- d. Network administration, including 1) design, maintain, and install terminals, printers, hubs, switches, cables and routers 2) network maintenance, to enable reliable operation of the local area network, including services, and internal network components
  - e. Linux system administration. Linux is the operating system used to operate the Oracle database and AppServer for the XTEND drafting system, and for web components.
  - f. Storage Area Network (SAN) or (NAS) administration.
  - g. Answer questions relating to the use of the network, or Revisor systems in general.
3. Database administration functions.
- a. Database administration
    - i. Perform maintenance operations as assigned. The database should be both high availability and high performance.
    - ii. Monitor database performance. Work with legislative programmers to identify software that degrades database performance.
    - iii. Protect database contents. Monitor the database for malicious attacks and/or unauthorized access. Report such incidents to the Deputy Revisor for IS. Work with state security experts to resolve and prevent such incidents.
    - iv. Preserve database contents. Monitor procedures for preserving the database's contents.
    - v. Continuously learn about the capabilities and limitations of the commercial database in use. Participate in the installation of new versions of commercial database products.
  - b. Database programming assignments
    - i. Maintain code for full-text searching of documents stored in the database.
    - ii. Design and code SQL statements for use by other programmers.
    - iii. Perform batch import, export, and conversion of data.
4. Perform other duties as assigned.

**Budget Responsibility:**

None, other than to recommends hardware or software purchases to the Deputy Revisor for Information Systems.

**Supervisor Responsibility:**

None

**Indirect Supervision:**

Trainer and Help Desk Specialist 1 and II, in regard to specialized applications.

**Scope of Relationships:**

- 1. External contacts:
  - a. Weekly contact with information services staff in other legislative offices
  - b. Quarterly contact with technical support engineers to resolve issues in commercial software applications.
- 2. Internal contacts:

- a. Daily contact with other Revisor's office computer staff
- b. Daily contact with independent contractors hired to maintain existing IT systems
- c. Weekly contact with other Revisor's office staff such as deck, attorney, or administrative staff

### **Decision Making & Impact of Error:**

1. Discretion. The Systems Analyst/Programmer I typically receives an assignment or project from the Deputy Revisor for Information Systems or the Data Systems Project Manager
  - a. Primary decision-making
    - i. on how to develop and implement the specific project assignment
  - b. Shared decision-making:
    - i. on recommended hardware or software purchases
2. Impact of Error
  - a. Errors in programming could result in the failure of an application, loss of data, or delay in the ability to produce data
  - b. Errors in system administration could take down all or part of the system, cause loss of data or allow access to sensitive information

### **Working Conditions/Physical Demands:**

1. Normal office conditions, approximately 90% of the time
2. Occasional lifting of heavy computer equipment, approximately 5% of the time
3. Occasional long hours to solve computer problems or be on-site for trouble-shooting, approximately 5% of the time
4. During session, rotate on-call duty with other computer staff, for a one week time period

### **Minimum Qualifications:**

1. Education. The minimum education required is a four-year computer science degree, or the equivalent, based upon at least three years of work in the computer field
2. Experience. No work experience is necessary unless it is needed to substitute for the education requirement
3. Knowledge. Depending on the position, knowledge in one or more of the following is required:
  - a. Java; or PHP, and CSS programming languages
  - b. Microsoft Windows servers and a Windows scripting language (e.g. Perl, PowerShell).
  - c. Linux servers and Linux scripting languages (e.g., Perl, bash)
  - d. Hypervisor software for creating and running virtual servers
  - e. Office productivity software such as Microsoft Office applications
  - f. Internet concepts and usage such as html, http, telnet, ftp and e-mail
  - g. Relational database management systems (RDBMS). Familiarity with Oracle databases preferred.
4. Skills/Abilities. This position requires:
  - a. Analytical skills to diagnose problems, design corrections or new applications
  - b. Resourcefulness to solve a particular computer problem in a manner that will not adversely affect the other system components

- c. Initiative to develop new applications and enhance existing applications
- d. Judgment to determine the best way to solve a problem or design a new application
- e. Communication/relationship skills to be effective in communicating new applications or solving problems

**Desired Qualifications:**

- 1. Knowledge of the legislative process and users' jobs
- 2. Advanced knowledge in any of the applicable programming or system administration functions

**All identified duties are essential.**

**Distribution of copies – employee, supervisor and Human Resources.**